

**Remarks/Arguments**

Claims 1-48 are now pending in this application. In the January 28, 2004 Office Action, claims 24-40 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Claims 1, 6, 8, 9, 11-13, 15, 17, 20-23, and 45-47 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,771,453 to Haartsen (hereinafter "*Haartsen*"). Claims 24-26, 32, 35, and 38-40 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,598,412 to Griffith et al. (hereinafter "*Griffith*"). Claims 41-44 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,020,094 to Rash et al. (hereinafter "*Rash*").

Additionally, claims 2, 3, 14, 16, and 48 were rejected under 35 U.S.C. § 103(a) as being obvious over *Haartsen* in view of International Patent Application Publication No. WO 01/58181 to Bhatia et al. (hereinafter "*Bhatia*"). Claims 4, 5, and 19 were rejected under 35 U.S.C. § 103(a) as being obvious over *Haartsen* in view of *Griffith*. Claim 18 was rejected under 35 U.S.C. § 103(a) as being obvious over *Haartsen* in view of U.S. Patent No. 5,574,984 to Reed et al. (hereinafter "*Reed*"). Claims 7 and 10 were rejected under 35 U.S.C. § 103(a) as being obvious over *Haartsen*. Claims 27-31, 33, and 34 were rejected under 35 U.S.C. § 103(a) as being obvious over *Griffith* in view of *Haartsen*. Finally, claims 36 and 37 were rejected under 35 U.S.C. § 103(a) as being obvious over *Griffith*.

For the reasons set forth below, the applicants respectfully request reconsideration and immediate allowance of this application. Prior to discussing the reasons why the applicants believe that the claims currently pending in this application are allowable, a brief description of the present invention and the cited references is presented.

**Summary of the Invention**

The present invention provides a system, method, and apparatus for providing communication services through a mobile telecommunications network. In particular, aspects of the present invention employ a home base station (HBS) to detect the presence of mobile telephones and to communicate with and through the mobile telephones. The

HBS is in communication with a plurality of non-cellular telephone devices. The non-cellular telephone devices may be traditional corded or cordless telephone devices or may be devices specifically designed for use with the home base station. The HBS may contain, among other things, a mobile telephone interface unit, a mobile telephone registration unit, and a local telephone interface unit. Each mobile telephone that is used with a system of the present invention is equipped with a HBS interface unit and is capable of receiving and transmitting radio signals to and from the HBS.

A user first registers his mobile telephone with a HBS. To do so, the HBS and mobile telephone enter registration modes. Once the HBS enters registration mode, it checks whether a mobile telephone is within its coverage area by detecting radio signals emitted by the mobile telephone. If the mobile telephone is within its coverage area, the HBS receives the mobile telephone's registration information embedded in the radio signals and stores it. The HBS then sends its identification information to the mobile telephone, which receives the information and stores it. In this manner, multiple telephones may be registered with a single HBS, and a mobile telephone may be registered with multiple HBSs.

When a mobile telephone enters the coverage area of a HBS, the HBS receives the identification information from the telephone and compares it to registration information to determine if the telephone is registered. If it is, the HBS attempts to establish communications with the mobile telephone. The mobile telephone receives identification information for the HBS and compares it to identification information stored in memory to determine if the communication is from a registered HBS. If it is, the mobile telephone establishes communications with the HBS. The HBS then enables dialing tones to the non-cellular telephones in communication with the HBS.

When an incoming call is made to the mobile telephone, the mobile telephone passes the information to the HBS, and the HBS will send the ringing tone to all non-cellular telephone devices communicating with the HBS. The user can answer the call from any of the telephone devices including the mobile telephone. When the user wishes to make an outgoing call on a non-cellular telephone located in his bedroom, for example, he picks up the telephone and receives a dial tone. When the user inputs a destination number, the HBS receives the dialed telephone number and requests that the mobile

telephone make the connection to that number. After the connection is made, the user can talk on his telephone device as if the connection was made through that device.

#### Summary of the Cited References

*Haartsen* describes a telephone base station and method for providing access to a wire telephone network for multiple cellular telephones. The base station is connected to the wire telephone network by a single line so that the base station must communicate with multiple cellular telephones serially. Upon receiving an incoming call, the base station communicates with the identified cellular telephone and prevents access by the remaining terminals. As will be discussed in detail below, *Haartsen* specifically teaches the use of cellular telephones with a base station to communicate over a wire telephone network.

*Griffith* describes a switching arrangement and base station for wireless terminals. The switch arrangement has a digital port with a passive bus format to allow a base station to be connected to the channel and thereby interface a plurality of wireless terminals to the switch. The digital communication channel that is included in the passive bus allows the switch to register and keep track of a larger number of wireless terminals that are present in the base station's neighborhood even though only some of these terminals can be active concurrently. As will be discussed in detail below, *Griffith* does not teach communications from a corded or cordless telephone to be directed over a wireless network using a mobile telephone or selecting a mobile telephone for communication based on its history of staying within the base station's coverage area.

*Rash* describes a cordless telephone network comprising a base unit connected to a wire telephone network and a plurality of hand-held cordless telephones. Each hand-held cordless telephone has a distinctive identification code that the base unit stores during communication with the telephone. While communicating with a telephone, the base unit will not communicate with other telephones with different identification codes. All of the telephones communicating with the base unit, as taught by *Rash*, are hand-held cordless units.

Independent Claim 1

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. The applicants have amended independent claim 1 to more clearly reflect an aspect of the present invention. *Haartsen* fails to teach, suggest, or describe each recitation of independent claim 1. *Haartsen* teaches a base station that enables multiple cellular telephones to communicate over a wire telephone network. This teaching sharply contrasts the recitations of claim 1 which recites “a base station is operative to enable communication by the telephone device on the mobile telecommunications network through the at least one mobile telephone,” “wherein the telephone device comprises either a traditional telephone or a device specially designed to operate with the home base station.” Because *Haartsen* fails to teach “telephone devices” within the meaning of claim 1 and because *Haartsen* fails to teach a base station that enables communication over a mobile telecommunications network, independent claim 1 is allowable over *Haartsen*.

Independent Claim 8

Claim 8 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe each recitation of independent claim 8. In particular, *Haartsen* fails to teach “establishing communication between the at least one telephone device and the home base station; [and] establishing communication between the at least one mobile telephone and the home base station” as recited by claim 8. *Haartsen* teaches communication between a base station and a single cellular telephone at a time. Line 9 of the *Haartsen* Abstract states, “During communication with a given terminal, the remaining terminals in the local area are prevented from accessing the base station.” If only a single telephone is allowed access to the base station at a time, *Haartsen* cannot teach establishing communication between at least one telephone device and the home base station and between at least one mobile telephone and the home base station.

Further, *Haartsen* does not teach “transmitting the information identifying the at least one mobile telephone to at least one telephone device” as recited by claim 8. *Haartsen* teaches telephones that communicate with the base station independently and

one at a time. At no time during the method taught by *Haartsen* do two or more telephones in communication with a base station transmit information from one telephone to another. For at least these reasons, independent claim 8 is allowable over *Haartsen*.

#### Dependent Claim 9

Claim 9 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe each recitation of dependent claim 9. In particular, *Haartsen* fails to teach “if the identification information received matches the information stored, sending a request to establish communication with the at least one mobile telephone” as recited by claim 9. As discussed in detail below with respect to independent claim 20, *Haartsen* teaches a registration and authentication process without any details as to how that process operates. *Haartsen* teaches a mobile telephone that initiates communication with the base station by requesting attachment. There is nothing taught by *Haartsen* that states or implies that a request to establish communication with a mobile telephone is sent by any device. For at least this reason, and because claim 9 depends from allowable independent claim 8, dependent claim 9 is allowable over *Haartsen*.

#### Dependent Claim 11

Claim 11 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe each recitation of dependent claim 11. In particular, *Haartsen* fails to teach “sending the dialed telephone number to the at least one mobile telephone” as recited by claim 11. *Haartsen* teaches outgoing communications that flow from cellular telephones to a base station. The base station completes the call through the wire telephone network. *Haartsen* does not teach sending a dialed telephone number to a mobile telephone. For at least this reason, and because claim 11 depends from allowable independent claim 8, dependent claim 11 is allowable over *Haartsen*.

Dependent Claim 12

Claim 12 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe each recitation of dependent claim 12. In particular, *Haartsen* fails to teach “receiving a signal from the at least one mobile telephone, the signal indicating an incoming call” and “sending a message to the at least one mobile telephone, the message indicating that the at least one telephone device answered the incoming call” as recited by claim 12. *Haartsen* teaches incoming communications that flow from the wire telephone network to a cellular telephone via the base station. A mobile telephone will not send a signal to the base station or any other telephone indicating an incoming call since the incoming call comes through the base station to the mobile telephone.

Additionally, *Haartsen* teaches communication with the base station and a single mobile telephone. *Haartsen* specifically teaches preventing access to the base station when in use communicating with another telephone. Therefore, *Haartsen* does not teach sending a message to a mobile telephone indicating that another telephone has answered a call. For at least these reasons, and because claim 12 depends from allowable independent claim 8, dependent claim 12 is allowable over *Haartsen*.

Dependent Claim 13

Claim 13 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe each recitation of dependent claim 13. In particular, *Haartsen* fails to teach “determining if at least one telephone device is available for answering the incoming call” as recited by claim 13. *Haartsen* teaches a base station that rings at least one cellular telephone upon receiving an incoming call over the wire telephone network, whether a telephone device is available or not. Because *Haartsen* does not make an availability determination, and because claim 13 depends from allowable base claim 8, dependent claim 13 is allowable over *Haartsen*.

Independent Claim 20

Claim 20 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe each recitation of independent claim 20. In

particular, *Haartsen* fails to teach “registering the home base station with the at least one mobile telephone by storing identification information for the home base station; transmitting radio signals from at least one mobile telephone to the home base station, wherein the radio signals include identification information for the at least one mobile telephone; receiving a connection request from the home base station, wherein the connection request contains the identification information for the home base station; and establishing communication between the at least one mobile telephone and the home base station if the identification information received matches the identification information stored” as recited by claim 20.

Claim 20 recites, among other things, steps for registering the home base station with a mobile telephone. *Haartsen* does not teach these specific elements. *Haartsen* states that authentication occurs, but *Haartsen* does not disclose the particular elements recited by claim 20. For example, *Haartsen* does not disclose “registering the home base station with the at least one mobile telephone by storing identification information for the home base station” and “transmitting radio signals from the at least one mobile telephone to the home base station, wherein the radio signals include identification information for the at least one mobile telephone.” Further, *Haartsen* does not teach “receiving a connection request from the home base station” as recited by claim 20. In fact, *Haartsen* teaches in column 10, lines 2-4, “According to the invention, each time a terminal requests to be attached to the base station, an authentication process is started.” Therefore, *Haartsen* teaches a telephone requesting attachment to the base station rather than the base station sending a request to connect to the telephone. Accordingly, for at least these reasons, independent claim 20 is allowable over *Haartsen*.

#### Dependent Claim 21

Claim 21 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe any recitation of dependent claim 21. As discussed above with respect to dependent claim 12, *Haartsen* teaches incoming communications that flow from the wire telephone network to a cellular telephone via the base station. A mobile telephone will not send a signal to the base station or any other telephone indicating an incoming call since the incoming call comes through the base

station to the mobile telephone. For at least this reason, and because claim 21 depends from allowable independent claim 20, dependent claim 21 is allowable over *Haartsen*.

#### Dependent Claim 22

Claim 22 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe any recitation of dependent claim 22. As discussed above with respect to dependent claim 11, *Haartsen* teaches outgoing communications that flow from cellular telephones to a base station. The base station completes the call through the wire telephone network. *Haartsen* does not teach “receiving by the at least one mobile telephone a destination telephone number from the home base station” as recited by claim 22. For at least this reason, and because claim 22 depends from allowable independent claim 20, dependent claim 22 is allowable over *Haartsen*.

#### Dependent Claim 23

Claim 23 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. *Haartsen* fails to teach, suggest, or describe any recitation of dependent claim 23. As discussed above with respect to dependent claim 23, *Haartsen* teaches a base station that rings at least one cellular telephone upon receiving an incoming call over the wire telephone network, whether a telephone device is ready to answer the call or not. Because *Haartsen* does not make an availability determination, *Haartsen* does not teach a home base station that sends a message indicating that a telephone device is ready to answer the incoming call. For at least this reason, and because claim 23 depends from allowable base claim 20, dependent claim 23 is allowable over *Haartsen*.

#### Independent Claim 24

Claim 24 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. The applicants have amended claim 24 to correct the clerical error. Additionally, Claim 24 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Griffith*. The applicants have amended claim 24 to more clearly reflect an aspect of



the present invention. *Griffith* fails to teach, suggest, or describe each recitation of amended independent claim 24. In particular, *Griffith* fails to teach “a controller for controlling interactions among the mobile telephone interface unit, the local telephone interface unit, a mobile telephone registration unit, and a privacy unit, wherein the controller enables communications to be directed from the corded and cordless telephone devices over a wireless telecommunications network via a mobile telephone” as recited by claim 24.

*Griffith* fails to teach a controller that enables communications from a corded or cordless telephone to be directed over a wireless network using a mobile telephone. All of the devices communicatively linked to the base station taught by *Griffith* may communicate through the base station to the network. *Griffith* does not teach sending a communication from a corded or cordless telephone through the base station to a mobile telephone to the wireless network. Additionally, *Griffith* fails to teach a privacy unit and thus, *Griffith* cannot teach a controller that controls interaction between units including a privacy unit. For at least these reasons, independent claim 24 is allowable over *Griffith*.

#### Dependent Claims 27 and 28

Claims 27 and 28 were rejected under 35 U.S.C. § 103(a) as being obvious over *Griffith* in view of *Haartsen*. The applicants have amended claim 28 to correct a clerical error. The January 28, 2004 Office Action suggests that *Haartsen* provides privacy provisions that are equivalent to the “privacy unit” capable of “interpreting a privacy request message determining an originating device for the privacy request message, and disabling audio connections to other devices” as recited by claims 27 and 28. The applicants disagree. *Haartsen* teaches allowing only a single cellular terminal to communicate with a base station at any given time. As a result, there is no need for sending a privacy request, determining the origin, and acting on the request by disabling audio connections of other devices. If *Griffith* were to be modified with the teachings of *Haartsen* to improve privacy, *Griffith* would also only permit one telephone connection at a time and would not need to send and act upon privacy requests. For at least this reason, and because claims 27 and 28 depend from allowable base claim 24, dependent claims 27 and 28 are allowable over *Griffith* in view of *Haartsen*.

Dependent Claim 38

Claim 38 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Griffith*. *Griffith* fails to teach, suggest, or describe any recitation of dependent claim 38. The January 28, 2004 Office Action suggests that *Griffith*'s teaching of employing the registration feature to track wireless terminals reads on the selection logic being based on mobility history. The applicants respectfully disagree. Page 22, line 15 of the present specification defines mobility history as "history for remaining within the HBS coverage area." *Griffith* does not teach a base station that selects a mobile telephone to communicate with based on its history for remaining within the HBS coverage area. *Griffith*'s description of its registration feature has no relation to using selection logic based on mobility history. For at least this reason, and because claim 38 depends from allowable base claim 24, dependent claim 38 is allowable over *Griffith*.

Dependent Claims 39 and 40

Claims 39 and 40 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Griffith*. *Griffith* fails to teach, suggest, or describe any recitation of dependent claims 39 and 40. The January 28, 2004 Office Action suggests that *Griffith*'s registration or identification process being terminal-activated inherently suggests the capability of initiating a registration with the keypad or display on the apparatus. The applicants disagree. *Griffith* does not teach, suggest, or describe "a registration button, wherein the registration button being functionally connected to the controller" as recited by claim 39 or "wherein the registration button being a display on a user interface screen on the apparatus" as recited by claim 40.

*Griffith*'s teaching of a terminal-activated registration process simply means that the wireless terminal initiates the process, not that a registration button is pushed or even exists. In fact, column 5, lines 6-10 of *Griffith* states "These telephones are designed to activate themselves whenever they are initially connected to a port of the switch (e.g. plugged into a modular plug that is commonly found in the home or an office)." This statement specifically teaches that the terminals "activate themselves," which suggests that a user does not have to push a registration button. For at least this reason, and

because claims 39 and 40 depend from allowable base claim 24, dependent claims 39 and 40 are allowable over *Griffith*.

#### Independent Claim 41

Claim 41 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Rash*. *Rash* fails to teach, suggest, or describe any recitation of independent claim 41. Specifically, *Rash* does not teach “receiving a privacy request from an originating device” as recited by claim 41. *Rash* teaches cordless telephones that communicate with a base unit over a specific channel and frequency while preventing other telephones from using that same channel and frequency. This procedure is standard for every call made. There is no need for, or procedures for, sending a privacy request according to the teachings of *Rash*.

Additionally, *Rash* does not teach “if the originating device is a mobile telephone, disabling telephone devices connected to the home base station; and if the originating device is one of the telephone devices connected to the home base station, disabling other telephone devices, and sending a privacy request to the mobile telephone” as recited by claim 41. *Rash* teaches a plurality of hand-held cordless telephones communicatively linked to a base station. All of these telephones operate in the same manner. *Rash* does not teach more than one type of telephone device in communication with the base station. So, even if *Rash* teaches receiving a privacy request, which the applicants submit *Rash* does not teach, *Rash* does not teach performing two different actions depending on whether the request comes from a mobile telephone or a telephone device connected to the base station. For at least these reasons, independent claim 41 is allowable over *Rash*.

#### Dependent Claim 43

Claim 43 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Rash*. *Rash* fails to teach, suggest, or describe any recitation of dependent claim 43. The January 28, 2004 Office Action suggests that the voice activation/deactivation switch taught by *Rash* is equivalent to “disabling audio connections to the telephone devices” as recited by claim 43. The applicants disagree. Disabling a user’s ability to speak through the speaker of a telephone is not the same as disabling audio, or the ability of the user to

listen through the earpiece of the telephone. For at least this reason, and because claim 43 depends from allowable independent claim 41, dependent claim 43 is allowable over *Rash*.

#### Independent Claim 45

Claim 45 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Haartsen*. The applicants have amended claim 45 to more clearly reflect an aspect of the present invention. *Haartsen* fails to teach, suggest, or describe each recitation of amended independent claim 45. In particular, *Haartsen* fails to teach “a home base station interface unit for communicating with the home base station, wherein the home base station interface unit is operative to enable communication from at least one telephone device on the wireless network through the transceiver unit via the home base station” as recited by claim 45. As discussed above with respect to claim 1, *Haartsen* teaches a base station that enables communication over a wire telephone network, not a wireless network. *Haartsen* does not teach an interface that allows a telephone to communicate over the wireless network through the apparatus’s transceiver unit via the home base station. For at least this reason, independent claim 45 is allowable over *Haartsen*.

#### Dependent Claims 2-7, 10, 14-19, 25, 26, 29-37, 42, 44, 46-48


Because the cited references fail to teach, suggest, or describe the recitations of claims 2-7, 10, 14-19, 25, 26, 29-37, 42, 44, 46-48, and because claims 2-7, 10, 14-19, 25, 26, 29-37, 42, 44, 46-48 depend from allowable independent base claims 1, 8, 24, 41, and 45, dependent claims 2-7, 10, 14-19, 25, 26, 29-37, 42, 44, 46-48 are allowable over the prior art.

CONCLUSION

In view of the foregoing amendment and remarks, the applicant respectfully submits that the present application is in condition for allowance. Reconsideration and reexamination of the application and allowance of the claims at an early date is solicited. If the Examiner has any questions or comments concerning this matter, the Examiner is invited to contact the applicant's undersigned attorney at the number below.

Respectfully submitted,

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